Applicant: Joseph A. Kwak Application No.: 09/939,410

## REMARKS

In the office action, claims 23 and 28 were objected due to typographical errors. Thos claims have been amended accordingly. Claims 19 and 31 were rejected under 35 U.S.C. §112, second paragraph due to lack of antecedent basis. Appropriate revisions to claims 19 and 23 have been made. Claims 1, 2, 4-6, 13, 14 and 16-18 were rejected under 35 U.S.C. §102 as being anticipated by U.S. Patent No. 6,208,663 (Schramm et al.); Claims 19-21, 29 and 31 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,021,124 (Haartsen); Claims 3 and 15 were rejected under 35 U.S.C. §103(a) as being upatentable over Schramm in view of U.S. Patent No. 6,128,276 (Agee); Claims 7, 8, 11 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,529,561 (Sipola) in view of Schramm; Claims 24-28 were rejected under 35 U.S.C. §103(a) as being unpatentable over Haartsen in view of U.S. Patent No. 6,529,561 (Sipola); and claims 22 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Haartsen in view of U.S. Patent No. 6,522,650 (Yonge, III et al.).

The amended claims recite adjusting the encoding/data modulation to increase the channel capacity if a low number of retransmissions occur and lower the channel capacity if a high number of retransmissions occur. Schramm is cited in the office action as disclosing adjusting FEC coding and/or modulation in response to a counted number erroneously transmitted blocks. However, Schramm only discloses decreasing the channel bit rate when a number of retransmissions

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exceeds a threshold. See column 7, lines 1-37, in particular lines 19-22 and 33-37.

The present invention uses the occurrences of retransmissions to also increase the

capacity of the channel. This allows for each user in a system to experience similar

channel conditions by adjusting the modulation and coding scheme. As a result, the

average channel conditions for each user is maintained at an even level.

scheme in Schramm essentially keeps trying to retransmit the same block and

when these retransmissions continually fail, it drops the encoding and/or

modulation scheme to a lower bit rate scheme. Nowhere within Schramm or any of

the other prior art references, either alone or a combination, disclose the increasing

of the channel capacity in view of low retransmissions statistics.

For the above reasons, Applicant respectfully submits that all the claims are

allowable. If the Examiner does not believe that the claims are in condition for

undersigned. allowance, the Examiner is respectfully to contact the

Reconsideration and entry of this amendment is respectfully requested.

Respectfully submitted,

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